

PREVALENCE OF LOWER URINARY TRACT DYSFUNCTION AND URODYNAMIC OUTCOME OF PATIENTS ATTENDING A URODYNAMICS CLINIC IN A PREDOMINANTLY BLACK AFRICAN COMMUNITY.

Hypothesis / aims of study

To determine the outcome of urodynamic studies at an urban teaching hospital and explore the extent and distribution of urinary tract disorders in a black population.

Study design, materials and methods

Retrospective case note review and review of urodynamic traces done between January 20013 and March 2015 (a period of 27 months). Urodynamics were undertaken by the same person and all patients taken through pre-procedure and post-procedure counselling. Males were excluded from the study.

Results

A total number of 1393 women attended the Urogynaecology clinic during the study time and of these 105 (7.5%) underwent urodynamics. The age range was 15-77 years and majority 84 (80%) were of black African ethnicity, 12 (11.4%) were Asians while 7 (6.7%) were Caucasians. Of the 105 who underwent urodynamics, 47 (44.7%) had detrusor overactivity, 9 (8.6%) has urodynamic stress incontinence, 7 (6.7%) has mixed urinary incontinence and 4 were described as having a hyper-compliant bladder. Six urodynamic traces were missing and in 30 (28.5%) the traces were described as normal. The distribution of detrusor activity, urodynamic stress incontinence and mixed incontinence was 77%, 14.6% and 11.4% respectively among 61 patients with incontinence.

Only 8 (7.6%) had significant prolapse (stage 2 and above) on the POPQ classification. Conservative treatment measures were the first line of treatment with bladder and pelvic floor muscle training. Three women had mid-urethral slings inserted and concomitant prolapse surgery undertaken where indicated.

Interpretation of results

The prevalence of detrusor overactivity of 77% is far much higher than previously quoted in studies^(1,2) whose subjects were predominantly white. Conservative measures in the form of pelvic floor exercises and bladder training, fluid and diet management and weight reduction would be a reasonable approach for a majority of these patients. There is also a very small incidence of concomitant pelvic organ prolapse in this population which supports previous knowledge that prolapse is commoner in Caucasians.

Concluding message

More population based research is required to further understand the extent of lower urinary tract disorders and their distribution in the black population. Conservative treatment should be emphasized with training of appropriate health care providers such as continence nurses and physiotherapists.

References

1. Hannestad YS et al. A community-based epidemiological survey of female urinary incontinence: the Norwegian EPINCONT study. *Epidemiology of Incontinence in the County of Nord-Trøndelag*. *J Clin Epidemiol*. 2000 Nov;53(11):1150-7
2. Donaldson MM, et al. The natural history of overactive bladder and stress urinary incontinence in older women in the community: a 3-year prospective cohort study. *Neurourol Urodyn*. 2006;25(7):709-16

Disclosures

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